Georgia Tech College of Engineering
Gary S. May
Professor and Steve W. Chaddick School Chair

November 28, 2006

BY HAND DELIVERY

Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Reply Comments

ET Docket No. 06-135 & RM-11271

Dear Chairman Martin:

The School of Electrical and Computer Engineering (ECE) at the Georgia Institute of Technology supports the Alfred Mann Foundation's ("AMF") request that the Commission adopt service rules and allocate up to 20 MHz of spectrum to accommodate new wireless wideband microstimulator devices on a secondary basis.

The School of ECE at Georgia Tech is the largest school at Georgia Tech and one of the largest ECE programs in the nation. Over 2,300 students are enrolled in our graduate and undergraduate programs, and in the last academic year, 648 degrees were awarded, making us the largest producer of ECE degrees in the U.S. All ECE undergraduate and graduate programs are in the top 10 of the most recent college rankings by *U.S. News & World Report*.

Over 100 ECE faculty members are involved in 10 areas of research and education: bioengineering, computer engineering, digital signal processing, electric power, electromagnetics, electronic design and applications, microsystems, optics and photonics, systems and controls, and telecommunications. In particular, faculty in our bioengineering, digital signal processing, electronic design and applications, and microsystems technical interest groups have a strong interest in the development of AMF equipment.

The establishment of a service allocation is vital to the development of a new generation of wireless wideband medical devices designed to restore sensation and function to paralyzed limbs

and organs. These devices offer a safer, less invasive, and more effective treatment option than is available with existing equipment.

The Commission's rules currently do not provide any spectrum to permit operation of new wireless wideband microstimulator devices. Although the Commission has allocated some spectrum for medical telemetry operations and for medical implant communications services, this spectrum is not suitable for wideband medical implant devices that require larger bandwidths to perform more complex functions. Without adequate spectrum and service rules to support the operation of these innovative devices, millions of Americans will be deprived of a safe and effective medical treatment for their debilitating health conditions.

The Commission's notice of inquiry issued in the above-referenced proceeding is an important first step toward adopting the necessary rules to encourage deployment of the next generation of wireless wideband microstimulator devices. The School of ECE Georgia Tech urges the Commission to continue its efforts in this area by expeditiously granting AMF's request for commencement of a separate rulemaking.

Sincerely,

Gary S. May, Ph.D.
Professor and Steve W. Chaddick School Chair
School of Electrical & Computer Engineering
Georgia Institute of Technology

cc: Marlene H. Dortch
FCC Secretary